

Intermittent fever.

An

for Inaugural Thesis on the
succession of febrile diseases usually com-
mencing with chilblain and generally terminating
by a violent fit of intermission.

Intermittent Fever: owing to the re-
turn of the disease after a period of treatment
pursued in each case. By Name according to the
particular type of disease it is made to assume.
When they, John Battie my worthy
but long deceased friend wrote the
name is said to be of Virginia.

February 20, 1828.

Wild flowers. VIII

June 1890

100

South Hutchinson

100

Wade's valley

100

Red Rock prairie

Intermittent Fever.

General Character. This disease consists of a succession of febrile paroxysms, usually commencing with chills, and generally terminating in profuse perspiration, with intermissions or intervals longer or shorter according to the nature of the case, and the plan of treatment pursued in each; and is named according to the particular type it assumes or is made to assume. When the paroxysm occurs once every twenty four hours, every paroxysm being similar, the disease is said to have assumed the quotidian type and from that circumstance it is named a quotidian intermittent. If 48 hours elapse between the beginning of one paroxysm and the paroxysm next succeeding (the two being similar) it is called a tertian 48 hours elapse,

it takes the name of quartan. There are the three principal types of the disease, though of the two last, there are several varieties of which the most frequent are: the double tertian, having a paroxysm every day, with the alternate paroxysms alike. The double tertian with two paroxysms every other day. The triple tertian, with three paroxysms on one day, and one on the next. The double quartan, with two paroxysms on the first day, none on the second & third and two again on the fourth. The double quartan with a paroxysm on the first day, & another on the second, but none on the third. The triple quartan, with three paroxysms every fourth day. The triple quartan with a paroxysm every day, every fourth paroxysm being alike.

The tertian appears in the spring & is called borensis. The quartan in the fall and is called autumnalis. The tertian is the most

Not so well reading as usual and in
fact it is quite worse to day I am afraid
I believe it is about dinner time and I am
I guess rather dead with the amount and
intensity of time you have been working
and then added dead the while more
than usual I don't think you have been
working as we made up a number of miles
there unbroken and then getting back to
where we were I am not particular
in saying that the time it is more
than three and half all in number
any less it will be as much time
I feel of you unbroken with this, I
do you have much time during the
whole day working I think and at the
same time I think you will be
working all day and I think you

inflammatory and frequent form & most easily cured
- The quotidian next the quartan is the most rare
in occurrence & the most obstinate. The quotidian
makes its appearance in the Morning. The tertian
at Noon; and the quartan in the evening. The
tertian is the most frequent. The quotidian
next & the quartan least frequent. A paroxysm
of intermittent is divided into three stadia
or stages; to wit; the cold, hot, and sweating sta-
ges - The cold stage commences with languor,
sluggishness of motion, debility, yawning, stretch-
ing & aversion to food - The face becomes pale,
the features shrink, the bulk of every external
part is diminished & the skin is covered with
cuts anserina and appears constricted as if cold
had been applied - At length the patient feels
cold & universal rigors come on, with pain in
the head, limbs, and extremities - The respiration
is short, hurried and anxious - The urine is

almost colourless, & small in quantity, the sensibility
is greatly impaired; and the pulse: small, frequent, and
often irregular. In some instances drowsiness and stu-
por have obtained to such a degree as to amount
almost to apoplexy. These symptoms having continued
for one or two hours, gradually abate - being followed
immediately by the hot stage, which is evinced
by the following symptoms, to wit: increased
heat over the whole superficies of the body,
the face becomes flushed, the skin dry, thirst
considerable, pain in the head and ears, throb-
bing of the temporal arteries, anxiety & rest-
lessness - the respiration is fuller and more forc'd,
but still frequent - the tongue is furrowed, the
pulse has become more regular, hard & full &
sometimes delirium arises. The symptoms of the
hot as well as the cold stage, having continued
for some time, a moisture breaks out upon
the forehead and by degrees becomes general -

the heat and Thirst gradually abate. The urine deposits a lateritious sediment, respiration becomes free and full, & the pulse slow, soft, and regular; and the function of the lungs, stomach, skin and other parts are apparently restored from their abnormal to their normal state; until the next period of attack. When (the cause of the disease existing) we have presented to our view; the same or nearly the same train of symptoms, modified by the circumstances of the case or the means employed for the patient's relief. Yet there are some anomalies that should not be overlooked; namely that some paroxysms are not ushered in by a cold stage, & that others have not been accompanied by the hot. We are further informed by Jackson that the paroxysm of an intermittent fever has gone off by a copious discharge of urine and ab� evacuations; without any perspiration. Another anomaly

in this disease is; that it sometimes though rarely, locates itself in some particular part of the body; for instance an extremity has been known to go through all the stages of a paroxysm, the rest of the body remaining free from the attack. The causes of this disease are the following viz:

Marsh Miasma (called by the Italians: miasma) is the principal cause. Cold combined with Moisture is likewise a powerful agent in the production of this disease. Mental anxiety, abstemious diet, excessive evacuations, and whatever debilitates the system to a great degree may be enumerated among the causes of this complaint.

Treatment. This is divided into two kinds as applied during the paroxysm or palliative and that during the apyrexia or curative. During the paroxysm the physician's object

should be to hasten its different stadia or stages
and to relieve urgent symptoms. To effect this,
if the physician were called to a patient
during the cold stage. He would direct him
to be put to bed and warmly covered and have
bricks heated and reduced to a proper tempera-
ture by immersing them in cold water or
vinegar, or a mixture of the two, and afterward
have them wrapped up in suitable cloths
and applied to the patient's feet & if required
to other parts of the body. He would also
order his patient warm drinks, such as cha-
momile tea, & warm balm tea or eupatorium
(perfoliatum) tea; & if stimulants are required,
a little wine which may be given &c.
Opium is a very good remedy to relieve urgent
symptoms and check the progress of the
disease. To this fact I can afford some tes-
timony. Whilst I was a student of Medicine

under the late Dr Green H. Batter, he was accustomed to give his patients upon the slightest premonition of an attack, a dose of doses powder, which not unfrequently prevented the paroxysm, and when it did not, it relieved very much the distressing symptoms, and was so effectual in giving relief that it received from the vulgar (in the vicinity) the name of ague powder & they reposed such confidence in it, that they carried some of the powder with them on their journeys as they lived in a malarious country) to ward off an attack. The practice of giving opium in this disease originated with Dr Trotter, who says that if 20 or 30 gts. of the tincture of opium be given at the commencement of the cold stage, it will check the progress of the paroxysm altogether. It may be carried to a greater amount if circumstances require it. An emetic given an hour

before the period of accision, frequently prevents its recurrence and sometimes completely eradicates the disease, when given in its commencement. The best emetic that I have ever succeeded in this disease, is the following: *pubis ipsa evanescit*. Tartreis Antimonio et Potassa gr 2 Aqua Fontis 3 VIII. Miseri. The dose is a tablespoonful every ten or fifteen minutes until it operates, when it is immediately to be discontinued & its emetic effects to be promoted by tepid water. The podiluvium is also very good in this stage so is the application of tourniquets on the extremities of opposite sides, as for example: to the upper part of the arm on the one side & the superior part of thigh on the other. The physician would prevent the cold stage if in his power, if not, he would direct his remedies so as to mitigate the symptoms & obviate the effects of the disease & hasten the hot stage, which is the

sequel of the cold. The hot being formed, the physician should direct his remedies to it and attend to the indications to be fulfilled, which are to quiet irritation, prevent inflammation and promote perspiration. The first indication may be answered by an emetic, whiteness does not occur spontaneously; when the latter prevails, all the physician would do at that time, would be to assist nature: by copious draughts of sage, Chamomile, or balm tea. The second indication is to be fulfilled by bleeding the patient. & the third is to be answered by the use of some of the following diaphoretics. The best for this purpose is the acetate of ammonia, in the dose of 2 drs. every half hour, or ten grains of salt of tartar in a table-spoonful of vinegar at the same intervals; ten grs. of Nitre with one sixth of a grain of tartar emetic, or a grain of ipecacuanha, will answer; with tepid diluent drinks, as warm

of all kinds and all the day it passed
under the sun and was at noon about
as warm as full noon in the
desert and when the sun went down
it was about as cold as
it had been in the morning
and I will tell you what I did
the first time I went to the desert with
my wife we went to the mountains and
I took a walk up the side of the hill
and found a piece of rock
that was about a foot long and a
quarter wide with the name of a
piece of stone we then took a walk
and found a piece of rock a quarter wide
and about half the size of the one

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chamomile, or eupatorium (perfoliatum) tea; lemonade; a drink acidulated with elixir of nitric; or barley water with vinegar; vinegar why; a solution of nitre in the proportion of 7*i.* to the pint of linsed tea or gum arabic solution. Opium is highly recommended in this stage by Dr. Lind. Injurious in intermissions of a marked phlegmatic character; highly useful in cases of giddy reaction. Small draughts of cold water, when the skin is very dry and hot are both grateful & beneficial; predisposing to perspiration. Sponging the whole surface of the body with cold water or with vinegar adds much to the patient's comfort, when labouring under a high fever. This is the ordinary treatment of intermissions during the hot stage. — But when they are accompanied by inflammatory symptoms; the treatment is somewhat different. In the spring they are more or less inflammatory.

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and also during the prevalence of an inflammatory epidemic. — There is no difficulty in detecting this form of the disease by the symptoms which attend. — They are a full, hard, and strong pulse, laborious respiration, severe local pains in the Head and Heart. — The Treatment in this case ^{consists} of copious sweating during the paroxysm; followed by emetics, Mercurial purges and mild diaphoretics, such as the aforementioned.

In the sweating stage very little need be done, unless very profuse perspiration comes on, and is likely to injure the patient. In this case, the patient should be supported by stimuli; such as: a large blister over the epigastric region & sponging the body all over with a solution of alum & spirits. — The next is the treatment during the apyrexia; which should be commenced with the

peruvian bark; when the system has been previously prepared by emetics, blood letting, both general and local if required, diaphoretics &c. If the bowels be constive, they should be moved by some mild purgative; such as calomel or the extract of butternut or the powder of the May apple, the last of the three is a most excellent and very mild purgative, and from numerous experiments made on myself and others with that article, I am induced to believe that its effects on the system as a purgative medicine are equal to those produced by rhubarb or the butternut. possessing over them the advantage that Doseaults apparatus possesses over all others; namely it can be prepared by a very little trouble; as it grows in almost every part of the United States & exists in the greatest abundance. It may be compounded with calomel, rhubarb, butternut

and all along the river had many
old gullies and areas of mud
The mud is damp in the sun and
dries it makes a dry ground dirt and
will not grow in the mud so there
will not be a lot of the soil will differ
markedly from the mud. The soil will
have the topsoil on the surface
and will be under the surface soil
the topsoil is a dry soil in different
parts of the river will be damp so will
the soil have a different soil in it
and a different soil with a different
adobe soil mixed with the soil will
be more abundant the soil will be
soil mixed with the soil will be
damp soil, which is damp soil is
mixed with the soil the soil will

and other substances. The following is a most excellent purgative Medicine in this disease: Rx.
sulphuris 3*lb.* Magnesia 2*lb.* To be mixed in a little
sweet milk for a dose. Cinchona in some of
its forms is by far the most powerful tonic
febrifuge that physicians possess; and I will ven-
ture to say that we may almost regard it as
a specific in the mildest forms of this dis-
ease, and I have also witnessed its good effects
in several inveterate cases. If we wish to ob-
tain its best effects, we should attend par-
ticularly to the state of the patient's system
and not administer it when the phlogistic
diathesis prevail to a considerable degree, un-
less the urgency of the case should require
its immediate exhibition, under such cir-
cumstances it would occur to the physician
to administer the bark and hold a truce of
truce with the disease, until he could make

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an impression on the disease & help the vis medicatrix nature out of some of her difficulties, by attending to and fulfilling the several indications as they present themselves, at the same time supporting the patient's system.

Authors express contradictory opinions with regard to the use of purgatives & emetics as preparatory measures to the employment of the Cinchona. What I saw in the private practice of my preceptor in the early part of my medical career impressed on my mind the importance of preliminary measures and the following, was the sum of my reflections: that, notwithstanding a cure may be effected in most cases of the disease without them in less time, it is the safer practice, where the patient is of a robust habit and his bowels costive or where we have any reason to suspect organic derangement of the liver, spleen, kidneys or

or other party, as we should by delay, suffer the time for the use of such Measures to pass by without doing that, which we ought to have done; for it is agreed by most Medical writers, that the commencement of the disease is the proper time when the system can bear their operation. The existence of vicinal obstructions also forms an objection to the use of the bark. In such a case a mild Mercurial course must be premised or the bark may be given in conjunction with Mercury.

From an ounce to an ounce & a half of the former may be given per diem, in some cases. When it purges opium or hino may be given. When much acidity exists in the prima via, it may be combined with an alkali. The bark when rejected by the stomach may be combined with aromatics, such as: serpentaria, cloves, black pepper, capsicum &c.

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If the stomach should reject the bark tincture
after taste, or not be able to bear it from any
circumstance; it may be administered per rectum,
and in the case of children; it may
be applied in the form of the bark jacket.
The sulphate of quinine is a most valuable
preparation of cinchona; given in doses of
from one to three grains, every hour or two
pro re nata. Should it purge opium may
be given in combination with it.

A variety of other vegetable tonics have
been given in this disease, such as the
Prunus Virginiana, *Cornus Florida et sericea*,
Theiliocladron tulipifera, *aristolochia*
serpentina, the bark of the different
species of oak and willow, horse chestnut &c.
strong coffee has been recommended. The
Tilia acerifolia a very efficacious remedy.
Many other remedies have been used in this

disease as: The white oxide of arsenic, cuprum ammoniacum, alum, Zinc binthina, sulphur cupri, sulphur Zincii, Mustard, carbonat of ammonia, Camphor, the atrales, cinnamon, Fowler's solution of arsenic 46 46.

These tonics and stimulants are particularly useful when age, debility, a damp situation or a rainy season give the disease a more obstinate character. I have witnessed the good effects produced by a compound of Erythrina and Serpentaria, in the proportion of 75. of the former to 10 grs. of the latter, given in substance.

Lind speaks highly of 15 grs. of alum, ten of nutmeg & ten of extract of bark, given twice a day. Five grains of Camphor with a drachm of the bark or three grains of the carbonate of ammonia with the same quantity, or a grain of opium may

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be given when the system requires support,
the Habit phlegmatic, and in quartans.
When cough is combined with ague, blisters
to the breast, respiration, hirsute tea, deco-
tions of Mallow, Mucilage of gum arabic,
syrups, with nitre &c may be resorted to.—
bistimens or brown, black, or bilious stools
indicate the combination of purgatives
enetics & diluents.—Dr. John Bell, of this city,
informed the class of the Medical Institute
that a patient of his who had taken most
of the tonic Medicines prescribed in in-
termittents previous to the necessary depletion
by the lancet and purgatives with little
or no effect, was cured in a short time by
depletion by the lancet and purgatives & then
giving him the reputed remedies; which shew
the importance of the physician's attention
to the state of his patient's system in this as

well as in all other diseases. Other remedies have been used in this disease, such as: Hemor, large doses of opium and an alterative course of Mercury. The whole of the antiphlogistic system should be strictly enjoined. This system consists in the employment of cool air, in the summer, and a graduated temperature in the winter, a well ventilated room, the avoidance of all impressions upon the senses, both external & internal, the exercise of the body and mind, the taking in of aliments, ~~etc.~~ The diet should be light & consist of some of the following articles, to wit: toast water, lemonade, linsed tea, barley water with other similar articles, as, a solution of gum arabic, apple water, current jelly dissolved in water &c. Where there is great thirst, acidulated drinks should be used. Cleanliness is to be attended to throughout the complaint. Blisters do most good in this as well as in most other diseases; after the phlogistic diathesis

Has been greatly reduced or completely subdued; therefore their use should be held in reserve until the system is prepared; and in case of local pains as a general rule their use should be preceded by cups or leeches, or both; their action may be accelerated by previously applying rubefacients to the parts.

Described above in detail.

Causes of the disease
1. Excessive exertion
2. Inflammation of the brain
3. Disease of the heart

Causes of the disease
1. Disease of the heart
2. Disease of the brain

Causes of the disease
1. Disease of the heart
2. Disease of the brain

Causes of the disease
1. Disease of the heart
2. Disease of the brain

and about a mile there was a
rainbow, in the interval a violent shower
occurred and it became so dark
that we could not see the road. We
had to stop for a time to get out
of the mud.